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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/657,062

09/05/2003

Steve Hoffman

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9095

7590

08/02/2004

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EXAMINER

RACHUBA, MAURINA T

ART UNIT

PAPER NUMBER

3723

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/657,062	HOFFMAN, STEVE	
	<b>Examiner</b>	<b>Art Unit</b>	
	M Rachuba	3723	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-12 is/are rejected.
- 7) ☒ Claim(s) 7,8,13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/5/03</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7, and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hoffman 5,355,638 in view of Olson et al, 3,371,449.

3. '638 discloses the claimed invention except for the use of a fixture so that each tool is spaced from an adjacent tool, and placing the fixture into the vessel, and the fixture mounted to the vessel wall. Further, '638 does not disclose the claimed rotational speeds or times of processing. Regarding the use of a fixture, '449, figures 3-5, teaches the use of a fixture for mounting workpieces to be processed in a tumbling device, the workpieces mounted so that they are spaced from an adjacent workpiece, and the fixture mounted to the walls of the tumbling vessel. It would have been obvious to one of ordinary skill in the art to have provided '638 with the fixture of '449, column 5, lines 67-71, to provide uniform finishing of the surfaces of the workpieces.

Regarding the claimed rotational speeds and processing times, '638 discloses that "One use of the prototype has been to polish zirconia balls for use in medical applications in a two-stage polishing operation. The as-machined zirconia, including lathe machine marks, is smoothed in a first polishing stage that lasts about 1.5 hours using 30 micron diamond abrasive media, then is given a high shine in a second

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polishing stage that lasts about 1 hour at 325 rpm using 9 micron diamond abrasive media.” It is the examiner’s position that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided ‘638 as modified by ‘449 with the claimed processing speeds and times, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Here, ‘638 clearly discloses that it is old and well known to process workpieces at two different rotational speeds, for two different time periods, using two different abrasives. That applicant has found the optimum time and rotational speeds for a specific workpiece of specific material and surface characteristics involves routine skill. Further, that during the second stage the processing occurs at a second, and then a third slower stage is inherent to the device, as it does not come to an instantaneous stop when the processing ends.

#### ***Allowable Subject Matter***

4. Claims 7, 8, 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other similar tumbling methods are cited of interest.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is 703-308-1361. The examiner can normally be reached on Monday-Thursday from 8:30 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail, can be reached on (703) 308-2687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Rachuba  
Primary Patent Examiner  
29-Jul-04

A handwritten signature in black ink, appearing to be 'M. Rachuba', with a long horizontal stroke extending to the right.